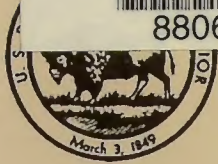


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Department of the Interior  
Bureau of Land Management

**DRAFT**

Salem District Office  
1717 Fabry Road, SE  
Salem, Oregon 97306

August 1992



# Salem District Resource Management Plan and Environmental Impact Statement

## Summary



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As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

**BLM-OR-PT-92-29-1792**





# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Salem District Office  
1717 Fabry Road S.E.  
Salem, Oregon 97306

TAKE  
PRIDE IN  
AMERICA

IN REPLY REFER TO:

August 1992

Dear Reader:

The Bureau of Land Management invites you to review the attached Summary of the Draft Salem District Resource Management Plan/Environmental Impact Statement (RMP/EIS). The RMP/EIS has been prepared in conformance with land use planning procedures established by the Federal Land Policy and Management Act of 1976. Following your review of the summary, you may wish to review and comment on the full draft. If you have not received a copy of the draft, please write or call the district planning team leader (503-375-5634/5646).

The planning area includes 393,600 acres of federal land administered by the BLM, primarily in 12 counties of northwest Oregon.

There are seven management alternatives, each with a different emphasis and each addressing the planning issues differently. Public comment played an important role in shaping the issues and the alternatives which have been analyzed in the RMP/EIS. Before the preferred alternative was developed, suggestions received from individuals, interest groups and other governmental entities were thoroughly considered. These suggestions were used to strike a reasonable balance, considering relevant legal mandates, between the expressed desires to emphasize the production of commodity resources; to maintain the current flow of resources from the public lands; and to protect, restore and enhance natural values.

Through the draft RMP/EIS, the BLM has tentatively established resource management goals (as expressed by each alternative); resource management objectives and specific management actions which would determine potential land uses; levels of resource production; areas in which use restrictions would apply; and lands which could be transferred, sold or exchanged.

The RMP will replace and supersede the Westside and Eastside Salem management framework plans, which were completed in 1983. When completed, the RMP will establish specific land use allocations and management direction for commercial forest harvest, biological diversity, special status species habitat, wildlife habitat, recreation, special areas, visual resources, cultural resources,

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energy and minerals management, land tenure adjustment, and rights-of-way for BLM-administered lands in the entire planning area. It will also identify rivers suitable for national wild, scenic or recreational river area status. The end product of this planning process will be an RMP which will integrate the natural resources and their subsequent uses into a balanced, sustainable approach to multiple use management of the Salem District for the expected life of the plan (i.e., the next 10 years).

I would appreciate you reviewing the summary and/or draft document and providing us with your written comments by December 21, 1992. Comments are most useful when they address one or more of the following: 1) errors in the analysis that has been performed, 2) new information that would have a bearing on the analysis, 3) misinformation that may have been used and could affect the outcome of the analysis, 4) requests for clarification, and 5) support of an existing alternative or definition of a substantive new alternative with the range of alternatives considered (an alternative that would provide a different mix of allocations than any existing alternative). You are invited to contact the district planning team leader at any time during the comment period for assistance.

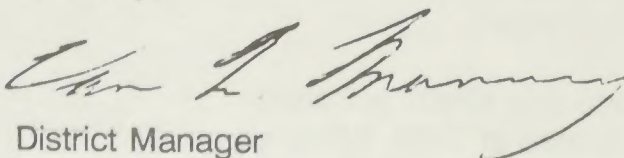
We welcome any information that will help us to best develop a management plan and analyze its anticipated effects. For example, although we have identified and quantified primary economic effects of the alternatives, we recognize that there are other effects on social values that are important, even though they are very difficult to describe or measure. Your comments may help us to better address these and other effects in the proposed RMP/final EIS.

BLM employees will be available at informal public meetings to be held during the comment period. The public meetings will be announced in local newspapers and in a district progress report.

An overview of all six of BLM's western Oregon draft resource management plans has been published in an executive summary. A copy may be obtained in our office or by writing the BLM at P.O. Box 2965, Portland, Oregon 97208.

Thank you for your interest in the multiple use management of BLM-administered lands. We encourage your continued participation in guiding the future management of our public lands.

Sincerely,

A handwritten signature in dark ink, appearing to read "Chris L. Branning", is written over the typed name and title.

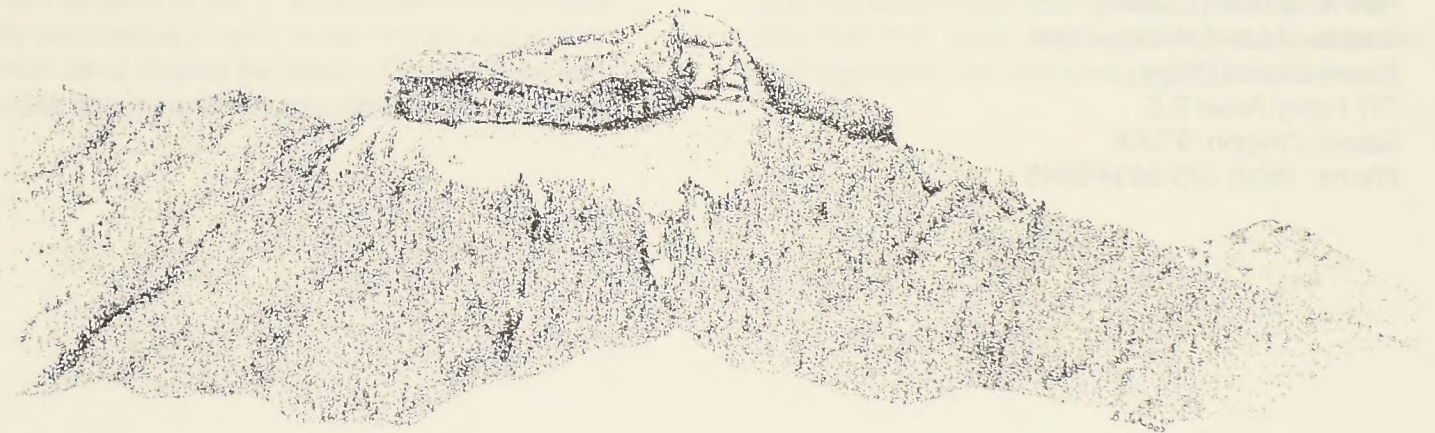
District Manager  
Salem District



U.S. Department of the Interior  
Bureau of Land Management

Draft  
Salem District  
Resource Management Plan  
**Environmental Impact Statement**

Prepared by  
Salem District Office  
August 1992



D. Dean Bibles  
State Director, Oregon/Washington

Van Manning  
District Manager, Salem District

Draft (X) Final ( ) RMP/EIS  
Department of the Interior  
Bureau of Land Management

1. Type of Action: Administrative (X) Legislative ( ).
2. Abstract: This draft resource management plan/environmental impact statement addresses resource management on 393,600 acres of federal land and 27,800 acres of reserved mineral estate administered by the Bureau of Land Management in its Salem District. Seven alternatives including no action (no change in the existing plan) are analyzed. These alternatives range from management of timber and other resources vital to the economy, to management and enhancement of values such as biological diversity, spotted owl habitat, old-growth forests, recreation opportunities and scenic resources. The preferred alternative would provide a planned annual timber sale level of 21.5 mmcf (136.5 mmbf), while meeting established water quality criteria in all watersheds. Also, 28,000 acres of old-growth forest would be retained at the end of the first decade; seven additional areas of critical environmental concern would be designated; and two river segments would be found suitable for designation under the Wild and Scenic Rivers Act.
3. The comment period will end on December 21, 1992.
4. For further information contact:

Bob Saunders  
RMP/EIS Team Leader  
Bureau of Land Management  
Salem District Office  
1717 Fabry Road S.E.  
Salem, Oregon 97306  
Phone: (503) 375-5634/5646



# USER'S GUIDE

The Summary presents a synopsis of the draft RMP/EIS. It also summarizes all alternatives but presents more detail for the preferred alternative.

Chapter 1 is the introduction to the draft RMP/EIS. This chapter includes a description of the planning area and the purpose and need for preparing the RMP/EIS. It also includes a discussion of the RMP's relationship to BLM policies, programs, and other plans and describes the planning process and planning criteria. Finally, it identifies the issues or concerns addressed in the RMP/EIS process.

Chapter 2 (Description of the Alternatives including the Preferred Alternative) has two major sections - management direction common to all alternatives and management direction by alternative. The first section is particularly important to understanding how lands would be managed under every alternative in the RMP. This chapter describes seven different alternatives which respond to the 11 issues identified in chapter 1. The alternatives provide a mix of uses and actions which could resolve the issues. Chapter 2 includes a tabular summary of the alternatives so they can be

compared. It also includes maps displaying the major land use allocations for each alternative, except no action. These maps are located in a map packet included with this document.

Chapter 3 (Affected Environment) describes the environment that could be affected or changed by implementing any of the alternatives. This chapter includes a description of the environmental factors (water resources, vegetation, wildlife habitat, visual resources, etc.) and major uses (recreation, timber, etc.) related to the issues.

Chapter 4 (Environmental Consequences) describes potential impacts and changes to the affected environment if any of the alternatives were implemented. It includes an overview of each alternative's relationship to plans and programs of other government agencies.

Chapter 5 describes agencies and organizations the BLM has worked with during the preparation of the draft RMP/EIS. It discusses relevant relationships with other agencies and summarizes public involvement.





# DRMP/EIS Summary

The Department of the Interior, Bureau of Land Management (BLM) is proposing a plan to manage the public lands in the Grand Staircase-Escalante National Monument (GSENM) in southern Utah. The plan is designed to protect the unique natural resources of the monument while allowing for the sustainable use of the land. The plan includes a variety of management actions, such as habitat restoration, invasive species control, and visitor management. The plan also includes a monitoring and evaluation program to ensure that the plan is effective and that the resources are protected.

The plan is being developed in accordance with the National Environmental Policy Act (NEPA) and the BLM's National System of Public Lands Management Plan. The plan is being developed in consultation with the public and other interested parties.

## Alternatives

The plan includes several alternatives for managing the public lands in the GSENM. The alternatives are based on the BLM's National System of Public Lands Management Plan and the NEPA requirements. The alternatives include a variety of management actions, such as habitat restoration, invasive species control, and visitor management. The plan also includes a monitoring and evaluation program to ensure that the plan is effective and that the resources are protected.

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## Alternatives A, B, and C

Alternatives A, B, and C are the three main alternatives for managing the public lands in the GSENM. Alternative A is the most comprehensive alternative, and it includes a variety of management actions, such as habitat restoration, invasive species control, and visitor management. Alternative B is a less comprehensive alternative, and it includes a variety of management actions, such as habitat restoration, invasive species control, and visitor management. Alternative C is the least comprehensive alternative, and it includes a variety of management actions, such as habitat restoration, invasive species control, and visitor management.

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## Introduction

The Salem District Resource Management Plan (RMP) will establish guidelines for the management of BLM-administered land in the Salem District Planning Area for approximately the next ten years. It will supercede and replace the Westside Salem and Eastside Salem management framework plans covering the same area, completed in 1983. The draft RMP/EIS has been prepared in accordance with the BLM planning regulations issued under authority of the Federal Land Policy and Management Act and written in accordance with Council on Environmental Quality regulations issued under authority of the National Environmental Policy Act.

BLM-administered lands in the planning area consist of 344,400 acres of O&C lands and 49,200 acres of public domain, acquired and other railroad grant lands, plus 27,800 acres of split estate (federal minerals).

## Alternatives

Seven alternatives have been developed to provide a range of responses to major issues identified earlier in the planning process. These issues are: timber production practices; old-growth forests; habitat diversity; threatened and endangered species habitat; special areas; visual resources; stream, riparian and water quality protection; recreation resources, including wild and scenic rivers; land tenure; and rural interface areas. Of particular interest is how to manage the remaining old-growth forests and the related effects on regional and local economies, biological diversity and the northern spotted owl, a federally listed threatened species.

The seven alternatives include no action (NA), which represents continuation of current management, five alternatives common to the western Oregon BLM districts (alternatives A-E) and the Salem District preferred alternative (PA). Each alternative offers a possible broad course of action that, if selected, would provide guidelines for future, more specific decisions. Site-specific management for various resources, annual timber sale plans, and issuance of rights-of-way, leases or permits will follow the guidelines identified in the RMP.

The land use or resource allocations of the alternatives are summarized in table S-1, found at the end of this summary. The key allocations for each alternative, except NA, are displayed on foldout maps accompanying this document. (Note: Those who requested only the RMP summary will receive a map of the PA but no

other alternative maps). Analysis of effects of each alternative except NA has been facilitated by development of 10-year representative timber management scenarios. These reflect possible timber harvest units, road locations and timber management practices during the expected life of the RMP. These scenarios include different levels of forest management practices (also shown in table S-1). Anticipated environmental consequences of the alternatives are summarized in table S-2, also located at the end of the summary.

## Alternatives NA and A-E

**No Action** This alternative would not change the BLM management direction established in the current management framework plans. The exception is where Congress has enacted legislation prescribing different management direction for specific geographic areas or transferred specific lands to the administration or ownership of other parties. The no action alternative would emphasize the contribution of timber production to community stability consistent with a variety of other land uses. Large and small blocks of older forest would be retained to contribute to ecological functions important to timber productivity. Habitat of threatened and endangered species and species proposed for such status would be protected. Other special status species would be protected to the extent consistent with high timber production. Timber harvest would not be planned in riparian zones of important waters. All existing special areas, including areas of critical environmental concern (ACECs), would be retained. Scenic resources would be managed in accordance with 1983 VRM classes. Recreation management would provide a range of facility-dependent and dispersed recreation opportunities.

**Alternative A** This alternative would emphasize a high production of timber and other economically important values on all lands to contribute to community stability. It would produce the highest sustained yield of timber on all suitable forest lands legally available for harvest. It would manage threatened and endangered species habitat and habitats of species proposed for such status as legally required, and protect habitats of other species with high potential for listing known only to exist on BLM-administered lands. Riparian zones would be managed according to requirements of Oregon's adopted statewide water quality management plan for forest practices and water quality criteria and guidelines. This would meet legal requirements for protection of water quality and protect anadromous fish habitat and other relevant values. Visual resources would be managed as inventoried in congressionally designated areas and other areas unavailable for timber management (e.g., extensive fragile areas and



## Summary

riparian management areas). Recreation management would provide existing high use recreation sites and trails and emphasize dispersed motorized recreation opportunities.

**Alternative B** This alternative would emphasize the contribution of timber production on O&C lands to community stability, consistent with a variety of other land uses. Public domain lands with nontimber values and uses of greater importance than timber production would be managed primarily for those values and uses. A system of old-growth and mature forest blocks would be retained to contribute to ecological functions important to timber productivity. Habitat of threatened and endangered species and species proposed for such status would be protected. Other special status species would be protected to the extent consistent with high timber production. Timber harvest would not be planned in riparian zones of important waters. All existing special areas would be retained and four new areas designated. Three river segments would be found suitable for designation as recreational river area components of the National Wild and Scenic Rivers System. Visual resources would be managed as inventoried in selected scenic and/or sensitive areas and areas unavailable for timber management. Recreation management would provide a wide range of facility-dependent and dispersed recreation opportunities. Special forest management practices would be considered for BLM-administered lands in managed rural interface areas (i.e., 1/4 mile around 1- to 5-acre zoned areas.)

**Alternative C** This alternative would emphasize retention and improvement of biological diversity while providing a sustained yield of timber to contribute to community stability. A system of old-growth and mature forest blocks would be established, focusing on the largest remaining areas of old-growth forest habitat. On lands available for timber production, biological diversity would be promoted by growing forests on long rotations, maintaining stands at low densities, and retaining parts of the stands at harvest. Habitats of threatened and endangered species, species proposed for such status, and species with a high potential for federal listing as threatened or endangered would be protected. Other special status species would be protected primarily through an emphasis on biological diversity. Timber harvest would not be planned in or immediately adjacent to riparian zones of important waters. All existing special areas would be retained and ten new areas would be designated. One river segment would be found suitable for designation as a scenic river area and three as recreational river areas of the national system. Visual resources would be protected in selected scenic and/or sensitive areas and in areas unavailable for timber harvest.

Particular emphasis would be placed on scenic values in existing wild and scenic river corridors and along river segments found suitable for designation. Recreation management would provide a wide range of facility-dependent and dispersed recreation opportunities, with emphasis on dispersed activities. Special forest management practices would be considered for BLM-administered land in managed rural interface areas (i.e., 1/4 mile around 1- to 20-acre zoned areas.)

**Alternative D** This alternative would emphasize management for plant and animal habitat diversity, dispersed nonmotorized recreation opportunities, and scenic resources. It would include a variety of other resource values or uses including some timber production. Spotted owl habitat would be protected in accordance with the report titled Conservation Strategy for the Northern Spotted Owl (Thomas et al. 1990). Other special status species would be protected. Timber harvest would not be planned in and adjacent to riparian zones of important waters or their immediate tributaries. All existing special areas would be retained and ten new areas designated. One river segment would be found suitable for designation as wild, two as scenic and four as recreational river area components of the national system. Visual resources would be managed as inventoried. Special timber harvest and forest management practices would be applied in managed rural interface areas (i.e., 1/4 mile around 1- to 20-acre zoned areas.)

**Alternative E** This alternative would emphasize protection of older forests and management and enhancement of values or uses such as dispersed, nonmotorized recreation opportunities and scenic resources. All forest stands 150 years and older and all suitable spotted owl habitat within two miles of known sites would be retained. Special status species would be protected. Timber harvest would not be planned in and adjacent to riparian zones. All existing special areas would be retained and eleven new areas designated. One river segment would be found suitable for designation as wild, two as scenic, and five as recreational river area components of the national system. Visual resources would be managed at levels higher than actual visual resource inventory classes (e.g., VRM class IV would be managed as VRM class III). Special timber harvest and forest management practices would be applied on BLM-administered land in managed rural interface areas (i.e., 1/2 mile around 1- to 20-acre zoned areas.)

## Preferred Alternative

The PA is the BLM's suggested planning solution. It will be reconsidered after review of public comments on the



draft RMP/EIS. The PA was formulated after initial analysis of the other alternatives. In formulating it, the district's managers considered public comments received in response to the district's January 1991 Summary of the Analysis of the Management Situation and other comments received during the planning process.

The land classifications of the PA are shown in figure S-1.

BLM managers believe the PA would provide a good balance between public demands and the capabilities and limitations of the resources, within the constraints of a variety of legal mandates. It represents a sustainable balance between protection of natural resources and production of economic outputs.

## Planning Issues and Major Concerns Addressed by the Preferred Alternative

### General

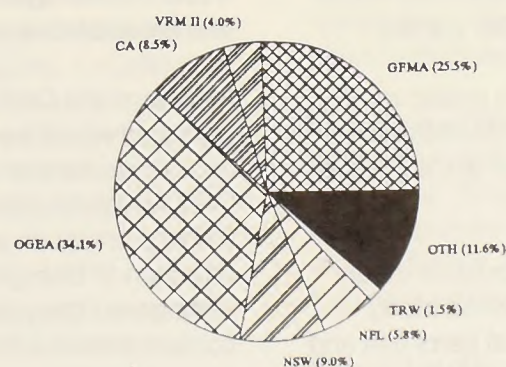
Inherent in all management practices is a goal of maintaining long-term site productivity of soils. This

goal would be accomplished by use of best management practices and minimizing disturbance of fragile areas.

All BLM prescribed fire activities would be conducted in accordance with the state of Oregon Implementation Plan, administered by the Department of Environmental Quality, and the state of Oregon Smoke Management Plan, administered by the Department of Forestry.

Special management would be provided for the Pacific yew, the bark of which is the only currently U. S. Food and Drug Administration approved source of taxol, a promising agent for treatment of various types of cancer. The strategy for management and collection of Pacific yew bark on federal lands is the subject of a separate environmental impact statement (EIS) being prepared by the U.S. Forest Service, with BLM as a cooperating agency. BLM actions covered by this RMP will be consistent with the strategy under development. This strategy will include how to assure a sustainable yew supply with full consideration of ecosystem relationships of the yew, regeneration of yew and possible extraction of taxol without harvesting individual trees.

The BLM would aid and support the Oregon Economic Development Department's efforts to help isolated, small communities develop and implement alternative



Land Classifications		Acres 1/
GFMA:	General Forest	100,300
VRM II:	Visual Resource Management II	15,800
CA:	Connectivity Areas	33,300
OGEA:	Old Growth Emphasis Areas	134,200
NSW:	Nonsuitable Woodland	35,600
NFL:	Nonforest Lands	22,700
TRW:	Table Rock Wilderness	6,000
OTH:	Other 2/	45,700
Total District Acres		393,600

1/ No overlapping acres.

2/ Includes riparian management areas, recreation sites/areas, special areas, T&E species sites, etc.

Figure S-1 Preferred Alternative Land Classifications



## Summary

economic strategies. Aid and support would consist mostly of coordination and prioritization of BLM recreation management and development activities which are mutually perceived by the BLM and the involved communities as benefiting the identified economic strategies.

## Water Quality and Riparian Zones

The BLM would continue nonpoint source management to assure protection of water and water-dependent resources. This would be done in cooperation with the U.S. Environmental Protection Agency and the Oregon Department of Environmental Quality. Management activities would be consistent with Oregon's adopted statewide water quality management plan for forest practices and would comply with Oregon's water quality criteria and guidelines. Best management practices would be selected to protect the identified beneficial uses of water and to assist in improving water quality limited streams. They would be based on site-specific conditions, feasibility, and the water quality criteria for waters potentially affected.

Since BLM-administered lands are a minority in many watersheds, impact analysis acknowledges that the BLM can only partly influence water quality. Factored into BLM management decisions would be an assessment of compliance with the anti-degradation policy of Oregon's water quality criteria. This assessment would recognize the influence of actions by other parties.

In watersheds providing surface water to public water systems serving municipalities, the goal of management would be to provide treatable water at the point of intake to the system.

Riparian management areas (RMAs) would be established to provide protection of riparian zones along perennial streams and other streams that carry fish and to protect natural functions. Within these RMAs, no timber harvest would be planned as part of the sustained yield timber management program, but some harvest activities could occur to achieve resource management objectives. These activities could include road construction and yarding corridors to facilitate timber harvest outside RMAs. RMA widths would be determined by on-the-ground riparian vegetation, stream characteristics and other relevant factors. Average widths on each side of streams and other waters are expected to be as follows: first and second order perennial streams 75 feet; third order streams 105 feet; fourth order 150 feet; fifth order 210 feet; sixth order 240 feet; lakes, ponds and other waters 150 feet. All first through third order fish-bearing streams would have RMAs of 150 feet. These widths for streams

approximate one-and-a-half times the average riparian zone width of such streams as measured in two western Oregon BLM districts.

## Old-Growth and Mature Forest

Old-growth conifer stands as defined by the BLM generally contain dominant trees at least 200 years old, a multilayered canopy of various tree species, and standing and fallen dead trees. Mature forest is 100 to 200 years old.

Forest lands not subject to planned timber harvest, due to allocation for protection of special values or concern about sustainability of timber production, total 87,300 acres. An additional 134,200 acres would be managed to maintain and strengthen a system of old-growth emphasis areas (OGEAs) to help maintain a diversity of plant and animal species in western Oregon (see map titled Preferred Alternative Strategies in accompanying packet). These areas would incorporate some of the lands noted in the preceding paragraph. Regeneration harvest of timber in all but two of these OGEAs would not occur until all younger stands on BLM-administered lands in such an area are at least 80 years old and research has shown that such harvest can be designed to retain or quickly reestablish old-growth characteristics. In two OGEAs, regeneration harvest would begin in the first decade. These areas would be managed to retain old-growth characteristics and reestablish them as quickly as possible.

In most of the OGEAs, forests between 50 and 70 years old would be managed to control their density to accelerate creation of old-growth conditions. These OGEAs would ultimately be subject to regeneration timber harvest on a cycle of some 300 years, with retention of biological legacies including an average of eight green trees per acre. (Biological legacies are components of a forest stand, e.g., large trees, down logs and snags, reserved from harvest to maintain site productivity and to provide structure and ecological functions in subsequent forest stands.) In two OGEAs, even aged forests between 50 and 110 years would be managed to control density to accelerate creation of old-growth conditions. Regeneration timber harvest in these OGEAs would begin as soon as the plan is approved. Timber would be harvested on cycles of 150 to 200 years. Biological legacies would be retained by leaving 12 to 20 green trees per acre at regeneration harvest.

Connectivity areas (CAs), totalling 33,300 acres, would link OGEAs wherever possible (see Preferred Alternative Strategies map in accompanying packet). The CAs would be managed on regeneration harvest cycles of



150 or 200 years, with retention of biological legacies including an average of 12 green trees per acre. Together CAs and OGEAs would contribute to regional biological diversity by linking to such areas in other districts and protected national forest lands. This would provide subregional connectivity and eventually contribute to the recovery of the northern spotted owl.

As of 1988 some 101,800 acres of the BLM-administered forest land in the planning area had older forest stands (see table S-2 for old-growth and mature forest acres). PA management would provide some 98,600 acres of older forest at the end of the expected 10-year life of the RMP and some 202,600 acres of older forest if the plan were continued for 100 years. The result would be a short-term decline followed by a long-term increase in biological diversity. The trend in amount of old-growth forest is illustrated in figure S-2.

## Timber

The allocation of commercial forest land is shown in figure S-3. For a comparison of the PA with other alternatives, see table S-2. The annual allowable timber sale quantity (ASQ) would be 21.5 million cubic feet (136.5 million board feet Scribner short log). This is about 57 percent of the current ASQ (239.2 million board feet).

The lands in general forest management areas (GFMAs) would be managed on a regeneration harvest cycle of 70-110 years. Biological legacies, including an average of six green trees per acre, would be retained to assure forest health. Commercial thinning would be applied in GFMAs where practicable and where research indicates there would be gains in timber production.

New timber harvest roads would be kept to the minimum necessary for management. Some 16 miles of new roads are expected to be constructed to support timber sales sold during the life of the RMP. This would expand the existing BLM timber management road network by less than one percent.

Four types of site preparation treatment would be used to prepare newly harvested and inadequately reforested areas for planting of trees: prescribed burning, herbicide application, and mechanical and manual techniques. Selection of treatments for site preparation, as well as for later management of vegetation suppressing conifer seedlings, would use an integrated vegetation management approach, emphasizing techniques proven most effective at assuring seedling survival and growth. This is in conformance with BLM's 1992 *Record of Decision, Western Oregon Program* -

*Management of Competing Vegetation*. Prevention of conditions that cause or favor the establishment of vegetation which competes with young conifers is the preferred strategy. Although broadcast burning would be the primary site preparation method, it would be avoided on highly sensitive soils. Burning would be conducted in accordance with Oregon Smoke Management Plan rules and directives administered by the Oregon Department of Forestry. Air quality would be maintained.

Harvested areas would be planted with indigenous commercial conifer tree species to promptly achieve adequate reforestation following regeneration timber harvest. Generally, this would occur within a year after completion of harvesting. Genetically selected seedlings, from a broad selection of parent trees, would be used to the extent available. This would maintain genetic diversity.

Precommercial thinning would be applied in managed stands to meet timber management and density management objectives. Fertilization would be applied to stands precommercially or commercially thinned, stands partially harvested for density management, and other stands where plantation spacing has achieved desired results. These intensive management practices plus planned conversion of lands now growing brush or hardwoods to predominately conifer stands, would contribute 3.5 MMBF (2.5 percent) of the PA ASQ. By comparison, the same set of practices in the current plans contribute 8 percent of the ASQ.

Outside the GFMAs and in VRM II areas, timber production under more extensive restrictions would take place. Timber management in OGEAs and CAs is described in the previous discussion of Old-Growth and Mature Forest. VRM II areas would be managed on a 150-year rotation.

## Special Status (including Threatened and Endangered) Species Habitat

BLM management would be designed to protect federally listed or proposed threatened and endangered species. Proposed projects that might affect such species are reviewed with the Fish and Wildlife Service through consultation under the Endangered Species Act. Consistent with policy identified in BLM's nationwide Fish and Wildlife 2000 plan, habitats would be managed to enhance populations of federal candidate species where appropriate. In all cases, the BLM would avoid contributing to the need to list such species. BLM actions would be designed to similarly manage state-listed and bureau sensitive species. Permitted actions would also not be expected to lead to



SALEM DISTRICT -- BLM  
PREFERRED ALTERNATIVE

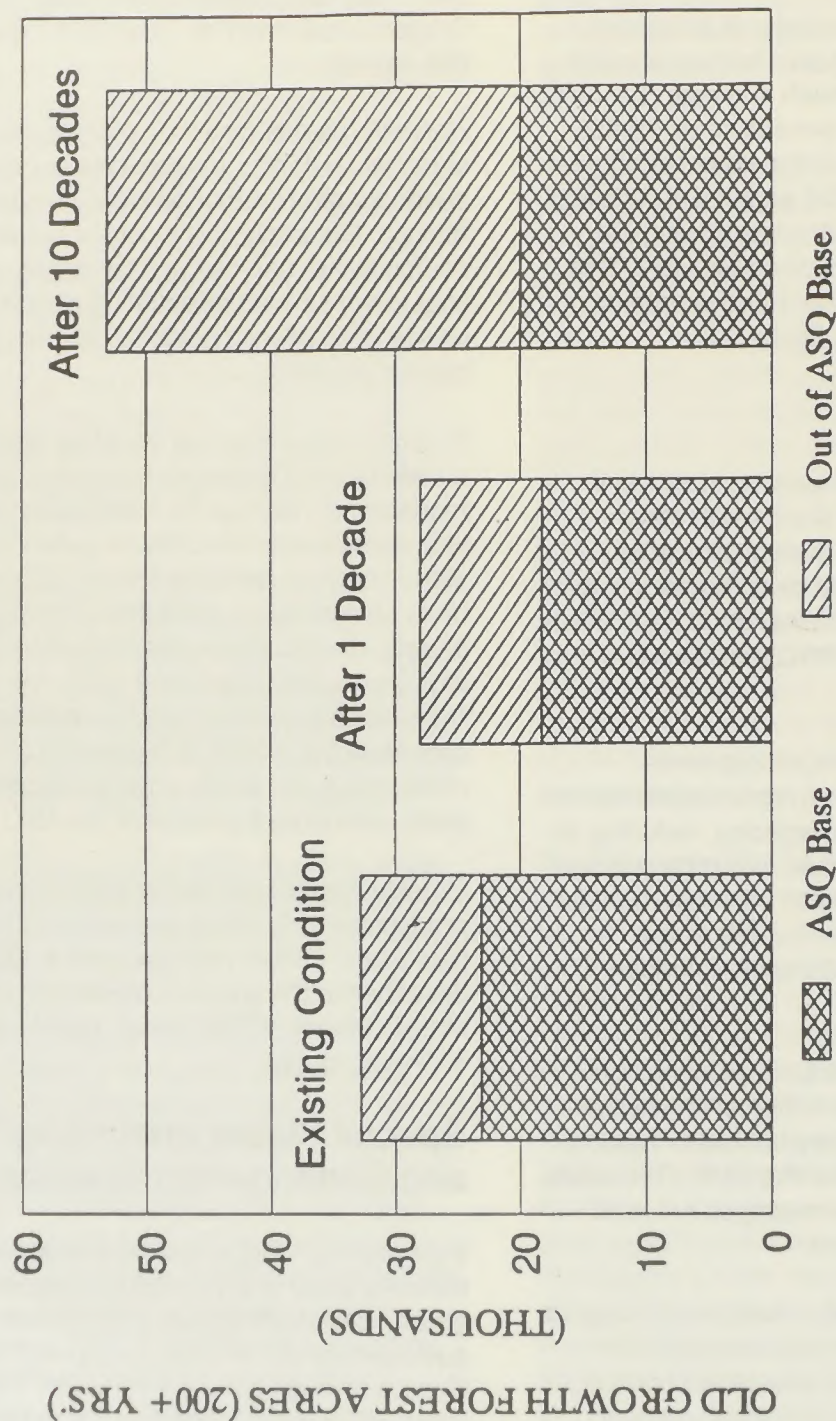
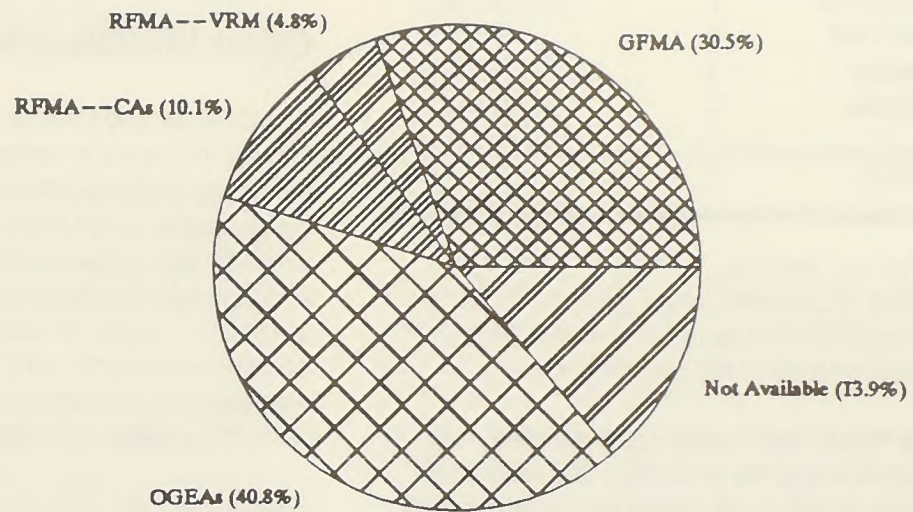


Figure S-2. Old Growth Forest Habitat





Management Areas		Acres 1/
-----		-----
GFMA:	General Forest	100,300
RFMA--VRM:	Restricted Forest-- Visual Resource Management II	15,800
RFMA--CA's:	Restricted Forest-- Connectivity Areas	33,300
OGEAs:	Old Growth Emphasis Areas	134,200
Not Available		45,700
Total Commercial Forest Land		329,300

1/ No overlapping acres.

Figure S-3 Preferred Alternative Net Commercial Forest Land Allocations



**Table S-3 Special Status Species Found on BLM-administered Lands.**

	Number of Plant Species	Number of Animal Species
Federal Endangered	0	3
Federal Threatened	0	3
Federal Proposed	1	2
Federal Candidate	3	39
State Listed	1	25
Bureau Sensitive	3	1

1 federal listing of any species. Table S-3 shows the numbers of plant and animal species in the above-mentioned categories that have been identified on BLM-administered lands in the planning area.

To support the Pacific bald eagle recovery plan, four existing nest sites would be protected. An additional three sites totalling 445 acres would be excluded from harvest to maintain their potential to provide future nest sites.

Habitat of the marbled murrelet is expected to decline in the short term under the PA. This is due to the already limited amount of suitable habitat that is available within 50 miles of the coast. In the long term, marbled murrelet habitat is expected to increase.

The northern spotted owl recovery plan was not final when the BLM's PA was developed. However, elements of the draft recovery plan are included in the PA. Among the elements included was protective management of proposed designated conservation areas (DCAs). All of the DCAs in the planning area are included in OGEAs. To contribute to the owl's recovery, the OGEAs would be managed to accelerate the development of spotted owl habitat where such habitat does not exist. The CAs would be managed to provide spotted owl dispersal and support habitat. In addition, some 100 acres around each site occupied by an owl pair would be protected until the site is vacated and the habitat is no longer considered important to spotted owl recovery. None of these sites would be harvested in the first decade.

Analysis of the effects of this management in a spatial population model indicates that the habitat resulting from this management after ten years would support a long-term carrying capacity of 17 to 50 pairs of spotted owls. After 100 years the habitat would support a long-term carrying capacity of 15 to 32 pairs of owls. The ranges vary according to optimism of assumptions about the relationship between the amount of a suitable

habitat at a location and pair formation and reproduction. In comparison, the 1991 inventory found that 49 of 90 sites visited were occupied by pairs of owls. The population model, however, indicates that current habitat would support a carrying capacity of 32 to 58 pairs. A comparison of suitable spotted owl habitat by alternative after 100 years is shown in table S-2.

## Other Wildlife (including Fish) Habitat

The OGEAs and CAs would provide biological connectivity corridors for a variety of species. To contribute to biological diversity, nonmerchantable down, dead woody material would be retained on all areas from which timber is harvested. Enough green trees and snags would be identified for retention to contribute to long-term support of cavity nester populations on BLM-administered lands at 60 percent of the optimum woodpecker population level. This compares to a current condition estimate of 40 percent.

Special habitats such as talus slopes and meadows would be managed to protect their primary habitat values. They would also be protected from adjacent management activities by 100-200 foot buffers when considered to be significant habitat by interdisciplinary planning teams.

The habitat of elk and other species would be protected through closure of certain roads to the public to minimize disturbance. Forage plants would be seeded to help meet population goals of the Oregon Department of Fish and Wildlife. This would be done following timber harvest in big game management areas where big game forage is considered deficient, and where seeding would be compatible with other resource objectives. Such seeding is expected to maintain and/or improve habitat conditions on BLM-administered lands.

Consistent with BLM's nationwide Fish and Wildlife 2000 initiative, the fisheries potential of anadromous fish streams would be enhanced. Large woody debris in and adjacent to streams would be retained unless the debris obstructs fish passage or has the potential to degrade a stream channel. In combination with BLM riparian zone protection, this management is expected to contribute to an overall long-term (200 year) 86 percent increase in coho salmon and 81 percent increase in steelhead in streams affected by habitat on BLM-administered lands. To the extent of available funding, fish habitat improvement projects would be undertaken to correct factors limiting anadromous fish production. Included would be projects improving 54 miles of existing stream habitat for salmon and steelhead.



## Special Areas

All but one special area would be retained. The Big Canyon ACEC designation would be dropped, but values would likely be protected by other allocations. An additional nine areas would be designated as special areas. This would include two new research natural areas (RNAs), increasing the number of RNAs on BLM-administered land in the planning area to eight.

## Recreation

Consistent with BLM's nationwide Recreation 2000 initiative, lands would be managed for a wide variety of recreation opportunities. There would be particular emphasis on enhancement of opportunities for recreation at developed sites.

Twelve existing recreation sites would remain open. An additional 14 sites would be constructed if funding is available. The emphasis of facility management and development would be to accommodate the increasing demand for recreation opportunities close to population centers and accessible by road.

The Molalla River and Quartzville Creek roads (BLM roads and county roads on BLM-administered lands) would be dedicated as national backcountry byways.

To facilitate motorized recreation, 287,700 acres of BLM-administered land would be open year round to off-road vehicle (ORV) use. Some 30,800 acres would be closed to ORV use, and 75,100 acres would be limited. In closed and limited areas, vehicle use for administrative purposes and authorized removal of commercial commodities such as timber would be allowed.

Recreation visits for all activities except snowmobiling are expected to increase during the life of the RMP. Expected demand would be met for all activities.

Additional emphasis would be placed on interpretive and informational signing and maps to support state and local strategies for encouraging tourism.

## Wild and Scenic Rivers

Two river segments totaling 27.7 miles would be found suitable for designation by Congress under the Wild and Scenic Rivers Act. These segments are identified in table S-4. Approximately 23.5 other miles of river determined eligible for designation and studied by BLM would be found not suitable for such designation.

If designated by Congress, these would be additions to the National Wild and Scenic Rivers System.

**Table S-4 Suitable Wild and Scenic Rivers**

River Name	Segment Length (mi.)	Tentative Classification
Molalla River (segment B)	12.4	Recreational
Nestucca River (segment A)	15.3	Recreational

## Visual Resources

Some 14,700 acres protected by congressional designation and other high-value, highly sensitive areas would be managed for preservation of scenic quality. Some 24,600 acres of high-value, moderately sensitive areas would be managed to retain scenic quality. Landscape alterations caused by management would not attract attention. An additional 58,100 acres would be managed to partially retain scenic quality. Landscape alterations would not dominate the view.

## Cultural Resources

Prehistoric and historic sites would continue to be identified, protected as necessary and, where appropriate, interpreted for public education and enjoyment.

## Land Tenure

Land adjustments would emphasize exchanges to benefit multiple resource values. However, substantial acres of Oregon and California Revested Railroad Land available for timber management would not be exchanged for lands to be managed for a single purpose. Lands would be categorized as follows: zone 1 - lands would be retained in BLM's administration; zone 2 - land ownership may be blocked up in exchanges for other lands, transferred to other public agencies or given some form of cooperative management; and zone 3 - lands scattered and isolated with no known special resource values would be exchanged for private inholdings in the other zones or considered for sale or transfer to another agency or local government.

## Energy and Minerals

Most BLM-administered lands would remain available for mineral leasing (of oil and gas, coal or geothermal resources) and location of mining claims. However, special designations and allocations would restrict exploration and development in specific areas. These



restriction levels represent some increase in restrictions compared to the current plan, primarily due to added protection of recreation sites, special areas and threatened and endangered species habitat.

## Rural Interface Areas

RIAs with 1- to 20-acre zoned areas total 36,380 acres. These acres plus any other areas with rural residences would be considered for special timber management practices to protect personal health and property.

## Socioeconomic Conditions

BLM timber harvest is expected to support 1,250 jobs and provide \$27.1 million a year in personal income during the life of the plan. Those jobs are 1,320 less than the average supported from 1984-1988. Recreation activities on BLM-administered lands are expected to support 120 jobs.

The net decline in jobs cited above combines with an expected decline in jobs supported by U.S. Forest Service, private and other timber supplies. This would lead to substantial job losses in some communities in the planning area with consequent adverse effects on community stability.

Jobs are also supported by recreation and downstream and offshore recreational and commercial fishing for fish supported by BLM habitat. Fishing opportunities related to BLM management are not expected to change in the next ten years.

## Monitoring the RMP

Monitoring and evaluation of the resource management plan would be carried out at appropriate intervals for the following purposes:

- To be sure activities are occurring in conformance with the RMP.
- To determine if activities are producing the expected results.
- To determine if activities are causing the effects identified in the environmental impact statement.

## Consistency with State, Local, Tribal and Other Federal Plans

BLM planning regulations require that RMPs be consistent with officially approved or adopted resource-related plans, and the policies and procedures therein,

of the federal agencies, state and local governments and Indian tribes, so long as the RMPs are also consistent with applicable federal laws and regulations. The BLM has compared the PA of the draft RMP with a variety of such plans of other agencies. This alternative appears to be consistent with all such plans, policies and procedures, except the following:

## Forestry Program for Oregon

- Forest Land Use. Land allocated to commercial forest production is approximately 4,300 acres less than the current allocation.
- Forest Practices. With one exception, practices meet or exceed requirements of the Oregon Forest Practices Act and the Oregon Smoke Management Plan. The exception is a possible inconsistency with requirements for clearcut proximity. The PA can be conformed to new rules which are scheduled for completion in September 1992.

## Statewide Planning Goals

- Economy of the State. The PA would support lower levels of employment compared to the 1984-1988 baseline period.

## Local Government Plans and Policies

- Open Spaces, Scenic and Historic Areas and Natural Areas. The potential 40-acre Walker Flat ACEC is in conflict with Yamhill county's recent finding that the area is not a significant natural resource.

## Public Involvement

Public involvement has been an integral part of BLM's resource management planning effort. Activities have included mailers or brochures, public meetings, open houses, field trips, distribution of planning documents and related comment periods, informal contacts, group meetings, written letters and responses to comments. These efforts began in May 1986.

Mailers were sent out requesting comments on issue identification, development of planning criteria contained in state director guidance for the process, and BLM's analysis of the management situation which set the baseline for development of the draft RMP/EIS. Suggestions for formulation of the preferred alternative were also requested.



The draft RMP/EIS has been released for public review and comment until Dec. 21, 1992. After comments are received they will be evaluated. Substantive recommendations may lead to changes in the analysis of environmental consequences of one or more of the

RMP alternatives. The proposed RMP/final EIS is expected to be completed for public review next spring. Any protests on that document will be reviewed and addressed by the director of BLM before a record of decision on the RMP is completed.



Table S-1 Comparisons of Allocations and Management by Alternative<sup>1</sup>

Allocations/Management Actions by Alternative						
	No Action	A	B	C	D	E
Preferred						
Water Quality and Riparian Zones						
Riparian Management Area (RMA) Protection (Average width in feet each side of stream)						
Stream Order: 1 <sup>2</sup>						50 <sup>3</sup>
2 <sup>2</sup>					60 <sup>3</sup>	60 <sup>3</sup>
3		75	75	105	140	200
4		75	100	150	200	200
5		75	140	210	280	280
6 +		75	160	240	320	320
Lakes, ponds, & other waters		75	100	150	200	400
RMA (acres)	23,400	24,300	28,800	36,000	45,400	57,700
						40,600



Table S-1 Comparisons of Allocations and Management by Alternative<sup>1</sup>

Allocations/Management Actions by Alternative							
	No Action	A	B	C	D	E	Preferred
Old Growth and Mature Forest Habitat							
Management Direction	Manage older forest retention areas as allocated in 1983 plans (no harvest)		Contribute to habitat diversity and old growth in a corridor system with blocks of 640 acres connected by 80-acre stepping-stone blocks.	Manage for retention and improvement of biological diversity maintaining 18% of the land in restoration and retention blocks.	Manage as recommended by the 1990 Conservation Strategy for the northern spotted owl.	Contribute to habitat diversity by protecting existing stands over 150 years old, suitable spotted owl habitat within two miles of each spotted owl site and additional habitat to benefit amphibians and pileated woodpeckers.	Manage 47% of the land as old-growth emphasis areas. Manage 11% of the land as connectivity areas.
Area managed for retention & development of older forest (acres)	79,000	59,900	103,900	132,400	209,100	196,700	221,500
Area managed for maintenance of older forest characteristics (acres)	0	0	0	238,600	0	0	33,300
Older forest retained end of first decade (acres)	77,700	68,900	75,600	96,800	105,200	92,000	98,600



Table S-1 Comparisons of Allocations and Management by Alternative<sup>1</sup>

Allocations/Management Actions by Alternative							
	No Action	A	B	C	D	E	Preferred
Timber							
Forest Management (CFL) Allocations (acres) :							
Intensive or General Forest Management Area	278,000	311,000	264,900	0	0	132,700	100,300
Restricted	9,900	0	2,100	238,600	161,800	41,400	49,100
Enhancement of Other Uses or Not Available	41,400	18,300	62,300	90,700	167,500	155,200	179,900
Practices (assumed average annual acres for first decade):							
Regeneration Harvest	3,100	4,560	4,000	1,800	1,800	2,100	2,400
Commercial thinning /density mgmt. harvest	500	420	410	2,600	280	330	980
Site Preparation	2,320	3,010	3,010	410	1,320	1,570	1,640
Prescribed Fire	470	930	600	720	270	310	240
Other							
Stand Maintenance/Protection	2,640	3,870	3,400	970	1,500	1,770	1,840
Release/Pre-commercial Thinning	2,790	4,100	3,610	1,190	1,590	1,880	2,120
Brushfield/Hardwood Conversion	100	430	390	190	160	220	250
Planting/Regular Stock	1,370	2,920	2,330	920	110	510	660
Planting/Genetically Selected Stock	2,050	2,100	2,100	920	1,820	1,780	1,870
Fertilization	3,810	4,150	3,870	3,140	0	2,160	1,460
New road construction (miles/acres) first 10 yrs.	11/60	16/90	12/600	18/100	9/50	8/50	16/90
Allowable Sale Quantity (million cubic feet)	37.2	51.9	43.9	17.1	17.3	20.1	21.5
Allowable Sale Quantity (million board feet)	239.2	333.8	280.5	107.0	106.7	127.1	136.5







Allocations/Management Actions by Alternative						
	No Action	A	B	C	D	E
Preferred						
Special Areas						
Existing ACEC/RNA retained (#/acres)	6/2,797 14/9,061	0/0 1/106	6/2,797 14/4,823	6/2,797 14/4,823	6/2,797 14/9,061	6/2,797 14/9,061
Other existing ACEC retained (#/acres)	2/259	1/76	2/259	2/259	2/259	2/259
New ACEC/RNA designated (#/acres)	0/0	0/0	1/556 2/415	2/690 7/831	2/690 7/831	2/690 7/831
Other new ACEC designated (#/acres)	0/0	1/10	1/5	1/5	1/5	1/5
Other new Special Areas allocated (#/acres)	0/0	0/0	1/5	1/5	1/5	1/5
Total ACEC/RNA (#/acres)	6/2,797	0/0	7/3,353	8/3,487	8/3,487	8/3,487
Total other ACEC (#/acres)	14/9,061	2/116	16/5,238	21/5,654	21/9,959	21/9,959
Total other Special Areas (#/acres)	2/259	1/76	3/264	3/264	3/264	3/264
Recreation Resources						
Recreation sites						
Existing (# sites/acres)	12/766 1	2/633 0	12/766 6	12/766 12	12/766 12	12/766 14
Potential (# sites)						
Trails						
Existing (# trails/miles)	7/26 6	2/18 0	2/18 0	3/19 1	7/26 2	7/26 6
Potential (# trails)						
Special Recreation Management Areas						
Existing (#/acres)	1/5,300	0/0	1/1,062	1/1,062	1/5,300	1/5,300
New (#/acres)	0/0	0/0	1/406	2/725	3/3,042	6/16,382
Area open to ORV use (acres)	333,700	331,100	319,200	310,600	292,600	262,100
Area limited to ORV use (acres)	50,500	41,800	48,600	56,000	71,000	99,200
Area closed to ORV use (acres)	9,400	20,700	25,800	27,000	30,000	32,300
						30,800



Table S-1 Comparisons of Allocations and Management by Alternative<sup>1</sup>

Allocations/Management Actions by Alternative							
	No Action	A	B	C	D	E	Preferred
<b>Wild and Scenic Rivers</b>							
River segments found suitable for designation as:							
Recreational (#/miles)	0/0	0/0	3/28.5	3/28.5	4/34.8	5/51.2	2/27.7
Scenic (#/miles)	0/0	0/0	0/0	1/3.0	2/12.9	2/12.9	0/0
Wild (#/miles)	0/0	0/0	0/0	0/0	1/3.0	1/3.0	0/0
<b>Visual Resources</b>							
Management Direction	Manage visual resources in accordance with 1983 plans.	Manage available forest lands as VRM class IV and all other lands as inventoried.	Manage available forest lands as inventoried within 1/4 mile of recreation sites, state and federal highways and designated rivers. Manage other available forestland as VRM class IV. Manage all other lands as inventoried.	Same as A except on available forest lands where BLM-administered land is more than half of a watershed, management as inventoried.	Manage all lands as inventoried.	Same as D except manage as VRM class III all lands inventoried as class IV, and manage as class I all lands within 1/4 mile of recreation sites, state and federal highways and designated rivers.	Manage congressionally designated and other high value, highly sensitive areas as VRM class I. Manage high value, moderately sensitive areas as VRM class II. Manage other areas as VRM classes III and IV.
Area managed as VRM class I (acres)	0 <sup>5</sup>	10,400	17,000	17,200	17,200	21,400	14,700
Area managed as VRM class II (acres)	15,900	12,600	21,800	34,300	67,900	80,600	24,600
Area managed as VRM class III (acres)	62,500	10,800	19,700	49,100	52,200	291,600	58,100
Area managed as VRM class IV (acres)	298,000	359,800	335,100	293,000	256,300	0	296,200



Table S-1 Comparisons of Allocations and Management by Alternative<sup>1</sup>

Allocations/Management Actions by Alternative						
	No Action	A	B	C	D	E
Land Tenure						
Management Direction	Pursue sales, exchanges and transfers as defined in 1983 plans.	Make exchanges to enhance nondeclining timber harvest level on BLM-administered land. Sell or lease no commercial timberland.	Make exchanges of O&C lands emphasizing opportunities primarily to enhance timber management opportunities. Sell public domain lands and O&C lands other than available commercial forest lands, meeting criteria of FLPMA Sec. 203(a). Make leases to accommodate other appropriate uses.	Same as B except also make exchanges to contribute to conservation of biological diversity.	Emphasize exchanges to acquire lands with nontimber values. Sell lands other than available commercial forestlands, meeting criteria (1) or (2) of FLPMA Sec. 203(a). Lease only under the Recreation and Public Purposes Act.	Same as D.
						Make exchanges of O&C lands to contribute to biological diversity or to enhance timber management. Substantial acres of O&C forest land available for timber management would not be exchanged for lands to be managed for a single purpose. Sell public domain lands and O&C lands other than available commercial forest lands, meeting criteria of FLPMA Sec. 203(a). Make leases to accommodate other appropriate uses.



Table S-1 Comparisons of Allocations and Management by Alternative<sup>1</sup>

Allocations/Management Actions by Alternative									
	No Action	A	B	C	D	E	Preferred		
Rights-of-Way									
Rights-of-way Avoidance Areas (acres)	9,600	6,100	9,500	9,600	10,500	10,500	9,600		
Energy and Mineral Management									
Area with potential; open to mining claim location and operation (acres)	67,400	69,000	67,600	67,400	66,000	65,600	67,200		
Area with potential; closed to mining claim location and operation (acres)	8,900	7,300	8,700	8,900	10,300	10,700	9,100		
Rural Interface Area Management									
Area considered for alternative management practices (acres)	0	0	3,400	17,500	0	0	36,380 + <sup>6</sup>		
Area where clear cutting, herbicide spraying and prescribed burning excluded (acres)	0	0	0	0	17,500	36,400	0		
Area managed for VRM class II objectives (acres)	0	0	0	0	16,900	31,800	0		
Area managed for VRM class III objectives (acres)	0	0	2,300	14,900	0	0	0		

<sup>1</sup> See narrative for management direction common to all alternatives.

<sup>2</sup> Order 1 and 2 perennial streams would have average 75-foot RMAs.

<sup>3</sup> RMAs for intermittent streams

<sup>4</sup> Order 1, 2, and 3 fish-bearing streams would have average 150-foot RMAs.

<sup>5</sup> Although not allocated as VRM I areas, areas such as Table Rock Wilderness are managed to the same standards as VRM I areas.

<sup>6</sup> BLM-administered land adjacent to areas zoned for lots larger than 40 acres would also be considered for alternative management practices.



Table S-2 Summary of Environmental Consequences, Comparison of Alternatives

Effects	Alternatives						
	NA <sup>1</sup>	A	B	C	D	E	PA <sup>2</sup>
Air Quality (1,000 tons of slash burned <sup>3</sup> annually in prescribed fires, 10 years; baseline - 101.8)	68.6	93.9	91.4	45.6	40.2	47.6	38.1
Watershed Condition (end of 10 years; index based on management of all lands) <sup>4</sup>							
No. of watersheds projected to improve to a minor degree		2	4	6	9	4	6
No. of watersheds projected to decline to a minor degree		15	16	14	10	13	12
No. of watersheds projected to decline to a significant degree		9	7	5	5	6	6
No. of watersheds projected to not change		1	0	2	3	4	3
Biological Diversity							
After 10 years							
mature forest	60,500	57,100	57,100	74,800	76,100	59,300	70,600
old-growth forest	17,200	11,800	18,500	22,000	29,100	32,700	28,000
After 100 years							
mature forest	48,700	33,800	57,500	191,000	135,000	122,100	148,400
old-growth forest	33,500	23,700	44,100	51,500	74,400	77,400	54,200
Riparian Trend (end of 200 years)	-	-	+	+	+	+	+
Dominant Woodpecker Populations (% of potential, 10 years)	40	0	40	60	60	60	60
Elk Habitat (10 years) <sup>5</sup>							
No. of habitat areas improving	0	1	1	2	2	0	2
No. of habitat areas unchanged	0	6	8	8	18	14	18
No. of habitat areas declining	27	20	18	17	7	13	7



Table S-2 Summary of Environmental Consequences, Comparison of Alternatives (Continued)

Effects	Alternatives							
	NA <sup>1</sup>	A	B	C	D	E	PA <sup>2</sup>	
Fish Populations (end of 200 Years)	-	-	+	+	+	+	+	
Threatened and Endangered Species Spotted owl suitable habitat after 100 years (1,000 acres)		51	98	152	199	172	143	
Bald eagle breeding sites protected	4	4	4	4	4	4	4	
Potential bald eagle breeding sites protected	3	3	3	3	3	3	3	
Known marbled murrelet breeding sites protected	3	0	3	3	3	3	3	
Visual Resources (end of 10 years)	-	-	-	-	0	+	0	
Wild and Scenic Rivers (study river segments, 10 years)								
Number with outstandingly remarkable values (ORVs) beneficially affected	0	1	1	2	2	2	2	
Number with ORVs unaffected	8	3	4	6	6	6	6	
Number with ORVs adversely affected	0	4	3	0	0	0	0	
Recreation Use (capability to meet 10-year demand)								
Off-road travel	yes	yes	yes	yes	yes	yes	yes	
Motorized travel	yes	yes	yes	yes	yes	yes	yes	
Nonmotorized travel	no	no	no	no	yes	yes	yes	
Camping	yes	no	no	yes	yes	yes	yes	
Hunting	yes	yes	yes	yes	yes	yes	yes	
Picnicking, studying nature, etc.	yes	no	no	yes	yes	yes	yes	
Fishing	yes	yes	yes	yes	yes	yes	yes	
Boating	yes	no	no	yes	yes	yes	yes	
Swimming, general waterplay, etc.	yes	no	no	yes	yes	yes	yes	
Winter sports	yes	yes	yes	yes	yes	yes	yes	
Snowmobiling	yes	yes	yes	yes	yes	yes	yes	



Table S-2 Summary of Environmental Consequences, Comparison of Alternatives (Continued)

Effects	Alternatives						
	NA <sup>1</sup>	A	B	C	D	E	PA <sup>2</sup>
Timber							
Commercial forest land available for timber management (%)	87	94	81	72	49	53	86
Socioeconomic Conditions (annual average for expected life of plan)							
Planning area jobs dependent on BLM timber production (baseline - 2,570)	2,160	3,010	2,540	1,000	1,010	1,170	1,250
Planning area jobs dependent on recreation on BLM-administered lands (baseline - 120)	110	90	100	110	120	120	120
Planning area annual personal income dependent on BLM timber production (\$ million; baseline - 55.4)	46.7	64.9	54.9	21.6	21.7	25.4	27.1
Planning area annual personal income dependent on recreation on BLM-administered lands (\$ million; baseline - 1.6)	1.5	1.2	1.3	1.5	1.6	1.6	1.6
Average annual O&C receipts distributed to counties (\$ million; baseline - 11.5)	21.2	28.0	24.2	10.8	10.8	12.8	13.3

+ = increasing or improving - = decreasing or declining 0 = no change or negligible

<sup>1</sup> NA = no action alternative

<sup>2</sup> PA = preferred alternative

<sup>3</sup> Tons of slash burned correlates directly with the level of emissions.

<sup>4</sup> The planning area was divided into 102 analytical watersheds; 27 of those, where BLM administers substantial acreage, were analyzed. The NA alternative was not analyzed because a 10-year timber management scenario was not developed for it.

<sup>5</sup> The planning area was divided into 102 elk habitat areas; 27 of those, where BLM administers substantial acreage, were analyzed.













